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Conference on Human Factors in Computing Systems - Proceedings

Volume 18, 18 April 2015, Pages 1905-1910

33rd Annual CHI Conference on Human Factors in Computing Systems, CHI EA 2015; Seoul; South Korea; 18 April 2015 through 23 April 2015; Code 116996

## Using socio-ecological model to inform the design of persuasive applications (Conference Paper)

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## Abstract

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Diverse persuasive applications that aim for behavioural changes have been developed. However, the method in which particular persuasive design principles are chosen over others remains unclear. Meanwhile, the use of socio-ecological model has been widely utilized in clinical research, as a basis to understand the factors in the entire ecological system that influences behavioural patterns. Because persuasive technology aims to change the behaviour and attitudes of users, we believe that the use of socioecological model would be beneficial to inform the design of persuasive applications. Accordingly, in this paper, we attempt to demonstrate the mapping of the socio-ecological factors and persuasive design principles by conducting interviews and expert reviews. Based on our approach, 12 socio-ecological factors that influence physical activity behaviour, and corresponding relevant persuasive design principles to deal with these factors, are identified. Copyright is held by the author/owner(s).

## Author keywords

Health behaviour change   Persuasive technology   Requirements elicitation   Socioecological model

## Indexed keywords

Engineering controlled terms:   Design   Human computer interaction   Human engineering

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